

AFFIDAVIT OF LABOR EXPENSES  
AND IMPROVEMENTS MADE  
FOR THE ASSESSMENT YEAR  
ENDING SEPTEMBER 1, 1988

STATE OF NEVADA )  
                  ) SS. 124267  
COUNTY OF LANDER )

JAMES A McGLASSON, being first duly sworn, deposes and says:

1. That he is an agent for St. George Metals, Inc. of 135 East Second Street, P.O. Box 548, Battle Mountain, Nevada 89820.

2. That this affidavit is made on behalf of the current owners of the unpatented claims listed below:

Claims: Rod 7 through 24  
NMC#s: 273084 through 273101  
Claimants: VEK Associates, 336 E. York Way  
Sparks NV 89431

3. That an aggregate amount equal to at least ONE HUNDRED DOLLARS (\$100.00) per claim was expended for labor and improvements for the benefit of each and all the of the said claims as a contiguous group under a common plan of development for the assessment year ending September 1, 1988.

4. That the above claims are located in Eureka County, Nevada and are in N1/2 Section 12, T35N, R49E MDBM.

5. That the work consisted of geophysical surveys. A detailed report as required by Federal and Nevada mining laws is attached as APPENDIX A and is made a part hereof.

6. That the above work was performed on Rod claims 8, 10, 12, 14, 16, 18, 20, 22, and 24 as well as on the entire group Rod 7 through 24, as shown on the map in the attached APPENDIX A, between June 5 and August 30, 1988.

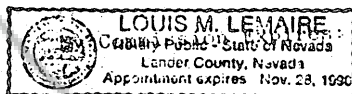
7. That a total of more than EIGHTEEN HUNDRED DOLLARS (\$1,800.00) was expended for the above labor and improvements for the purpose of developing the mineral potential of the claims and to maintain and hold such claims. The work was performed at the expense of St. George Metals, Inc. under the direction of the affiant and on behalf of the claim owners.

*James A. McGlasson* Date: 10/22/88

James A. McGlasson  
Agent for St. George Metals, Inc.  
P.O. Box 548  
135 East Second Street  
Battle Mountain, Nevada 89820

Subscribed and sworn to before me this 22<sup>nd</sup> day of October, 1988.

*[Signature]*  
Notary Public



APPENDIX A

The following report details the geophysical surveys undertaken as part of the development of the subject claims. The maps and descriptions give the location(s) of the surveys relative to the claim boundaries and discovery points. All work was conducted under the direct supervision of:

James A. McGlasson, M.S. Geology, 7387 S. Flower Street, Littleton, Colorado 80123, over 15 years experience in exploration geology.

Allan Spector, Phd., P.Eng., 24 Strathallan Blvd, Toronto, Ontario M5N 1S7, over 15 years experience in exploration geophysics.

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J37307

REPORT ON  
GRAVITY AND MAGNETIC SURVEY  
ROD CLAIMS 7 to 78  
Sections 2, 10 & 12, R49E T35N  
EUREKA COUNTY, NEVADA  
for  
ST. GEORGE METALS

by  
ALLAN SPECTOR AND ASSOCIATES LIMITED  
TORONTO CANADA

AUGUST, 1988

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Sections 2, 10 and 12, T35N R49E.  
Section 2 includes ROD Claims 25 to 60. Section 10 includes ROD Claims 61 to 78.  
Section 12 includes ROD Claims 7 to 24.

SURVEY DATE: July 21, 1988

SURVEY CREW: elevation: Mr. and Mrs. Arnold Hood  
gravity: Dr. Allan Spector  
magnetometer: Mr. Dale Moore

GEOPHYSICAL INSTRUMENTATION: gravimeter: Sodin model 410T thermostatically controlled, quartz spring meter, +/- 0.01 mgal. resolvability, readings taken on 1.5 foot high tripod.  
magnetometer: Geometrics Unimag 6836 proton-precession, +/- 10 gamma resolvability.

SURVEY CONFIGURATION (see Figure 1): 77 stations @ 200' interval on east-west line.

DATA PROCESSING AND PRINCIPAL FACTS: Gravity measurements were reduced to Bouguer gravity after correction for diurnal/instrument drift (all traverses began and ended at a base station; 0 W), latitude variation and elevation using a Bouguer density of 2.7 gm/cm<sup>3</sup> (also 2.2 gm/cm<sup>3</sup> for comparison).  
Magnetic measurements were corrected for diurnal variation. Principal facts of the survey are presented in Table 1.

COMMENTS AND INTERPRETATION:  
A very prominent gravity anomaly, 2 mgal. in amplitude, is observed, centred at station 20W. It originates at fairly shallow depth, at most 300 feet. It merits further investigation, i.e., gravity and magnetic grid surveying.  
A second gravity anomaly is observed in the vicinity of station 44W. It is about 1 mgal. in amplitude and originates 500 to 600 feet below ground. With the exception of these features, the gravity data is mainly composed of a negative gradient, going west from the developed part of the Carlin Trend. Faulting is reflected by gravity gradients at 7W and 71W.

Magnetic data between 0 W and 21 W (where the magnetometer became unserviceable) show a +/- 100 gamma oscillation in response to outcropping Cenozoic volcanics.

The analysis of the survey data embodied in this report is essentially a geophysical appraisal of the area. As such, it can incorporate only as much geological and geophysical information as the interpreter has available at the time. It should be judiciously used therefore as a guide only by geologists thoroughly familiar with the area and who are in a better position to evaluate the significance of any particular feature. With additional information, such as that provided by other surveys and eventually drilling, it may be possible to revise the significance of features identified in this study.

Respectfully submitted,

ALLAN SPECTOR AND ASSOCIATES LIMITED



Allan Spector Ph.D., P.Eng.

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PRINCIPAL FACTS: Line 1

NOTES:

1. Sampling interval is 200 feet.
2. Elevations (ELEV) are in feet.
3. Magnetic intensity values (MAG) are in gammas.
4. Bouguer gravity determinations, GRAV2.2 and GRAV2.7 are in milligals using Bouguer densities of 2.2 and 2.7 g/cm<sup>3</sup> respectively.

Stn.	ELEV.	MAG	GRAV2.2	GRAV2.7	Stn.	ELEV.	MAG	GRAV2.2	GRAV2.7
0	5212.0	53630.	343.99	310.69	50	5238.8		338.72	305.24
1	5210.2	53630.	344.03	310.74	51	5241.1		338.63	305.14
2	5209.1	53560.	343.51	310.22	52	5240.7		338.26	304.78
3	5225.1	53540.	343.55	310.16	53	5254.4		338.46	304.89
4	5221.8	53630.	343.60	310.23	54	5263.5		338.51	304.88
5	5220.4	53640.	343.41	310.05	55	5255.0		338.55	304.97
6	5232.7	53690.	343.14	309.71	56	5231.3		338.45	305.02
7	5231.2	53650.	342.90	309.48	57	5194.6		338.44	305.24
8	5232.8	53550.	342.48	309.04	58	5162.3		338.05	305.07
9	5226.0	53530.	342.37	308.97	59	5159.3		337.98	305.01
10	5197.3	53710.	341.88	308.57	60	5221.9		338.13	304.76
11	5171.9	53620.	341.35	308.30	61	5264.2		338.26	304.62
12	5153.5	53590.	341.19	308.26	62	5291.9		338.10	304.29
13	5134.4	53560.	340.98	308.17	63	5300.8		338.07	304.19
14	5129.4	53550.	340.94	308.17	64	5299.3		338.18	304.32
15	5133.7	53500.	341.04	308.24	65	5295.0		338.42	304.58
16	5143.6	53590.	341.17	308.30	66	5288.2		338.48	304.68
17	5159.5	53630.	341.38	308.41	67	5200.7		338.46	304.71
18	5189.9	53550.	341.90	308.73	68	5268.6		338.45	304.78
19	5187.9	53610.	343.06	309.91	69	5273.5		338.35	304.65
20	5189.3	53710.	342.02	308.86	70	5298.0		338.02	304.16
21	5204.0	53560.	342.56	309.30	71	5314.0		337.83	303.87
22	5201.9		341.10	307.86	72	5304.6		337.58	303.68
23	5209.0		340.41	307.12	73	5298.7		337.30	303.44
24	5223.9		340.13	306.75	74	5294.7		337.08	303.25
25	5247.4		339.76	306.23	75	5275.8		336.90	303.18
26	5265.7		339.42	305.77	76	5244.5		336.72	303.21
27	5275.7		339.34	305.63					
28	5272.7		339.65	305.96					
29	5276.8		339.94	306.22					
30	5289.3		339.92	306.12					
31	5295.5		339.99	306.15					
32	5295.3		339.71	305.87					
33	5283.8		339.50	305.74					
34	5271.0		339.51	305.82					
35	5260.1		339.48	305.87					
36	5247.2		339.86	306.33					
37	5236.0		339.55	306.09					
38	5232.7		339.36	305.92					
39	5223.2		339.29	305.91					
40	5218.4		339.37	306.02					
41	5218.9		339.39	306.04					
42	5223.1		339.32	305.94					
43	5221.2		339.49	306.13					
44	5209.8		339.49	306.20					
45	5199.4		339.25	306.02					
46	5203.5		339.14	305.89					
47	5217.4		339.01	305.67					
48	5232.4		338.88	305.45					
49	5239.2		339.17	305.69					

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760

Rod Cl.  
61-70

sec 1

W

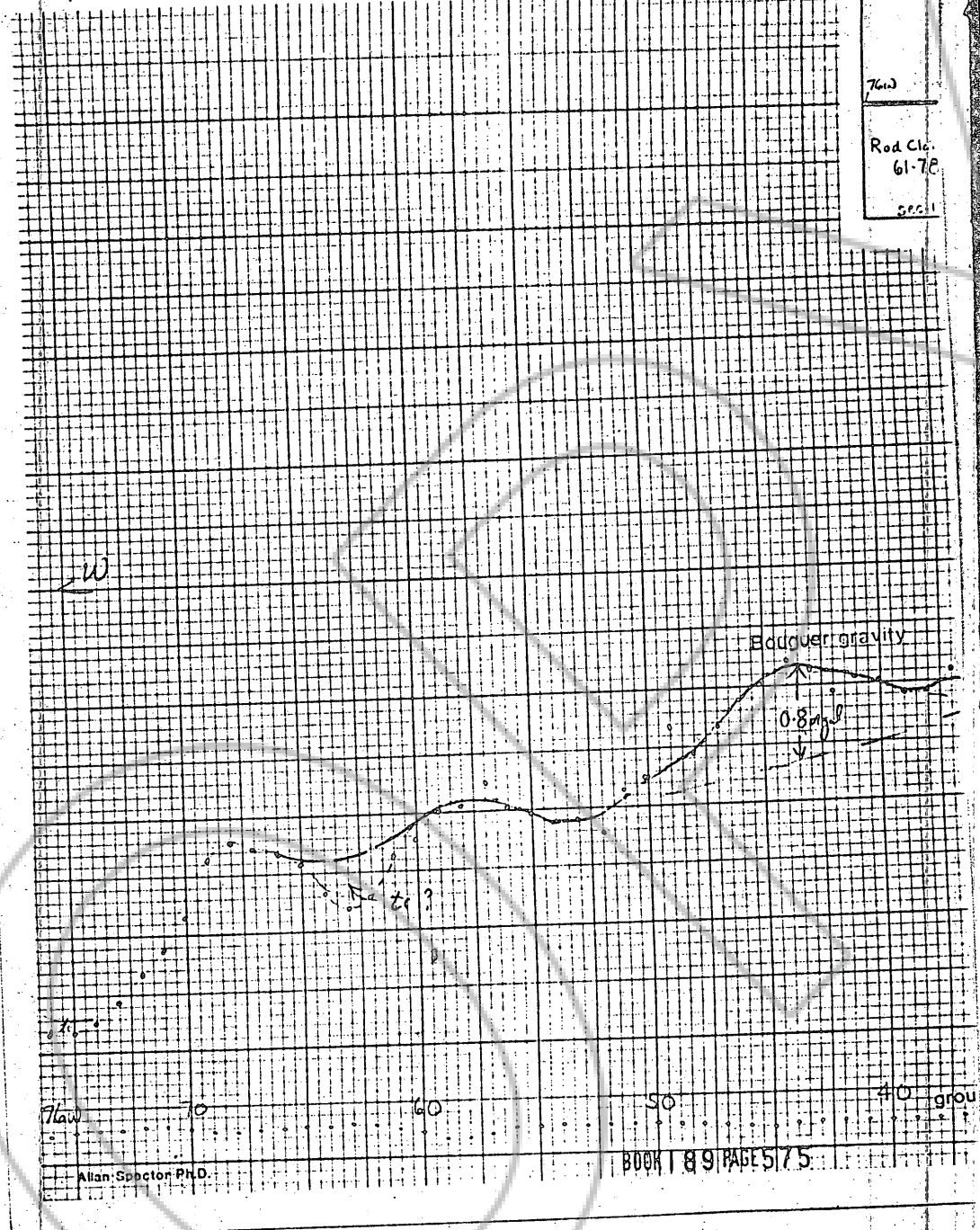
Eddover gravity

0.8

760 70 60 50 40 grou

Allan Spector Ph.D.

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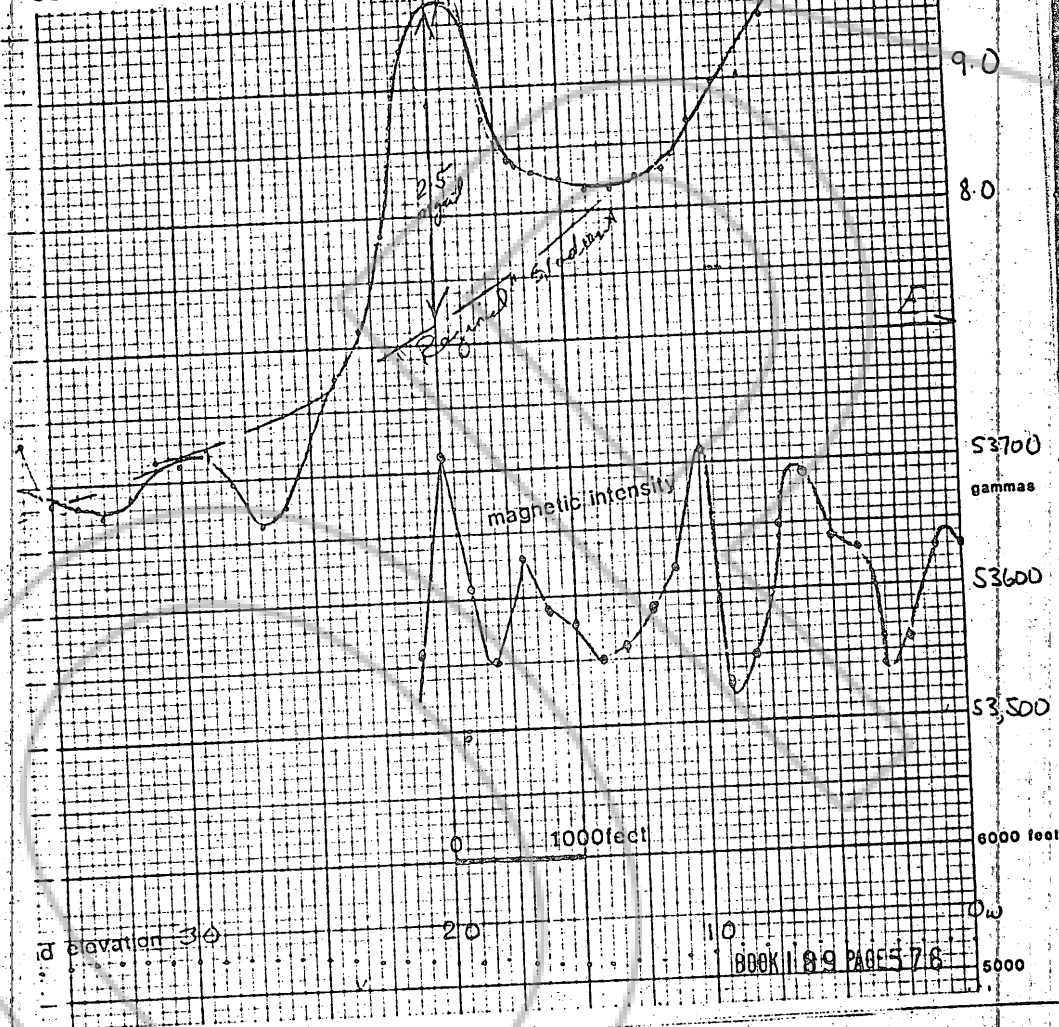
Rod Claims: 25-60	2600'
sec 2	Line 1
	Rod Claims 7-24
	sec 12

FIGURE 1  
AREA Sections 2, 10 & 12  
R49E T35N

Line 1

July, 1988

T35N R49E



## 1. INTRODUCTION

### 1.1 The Project Area

This report contains the results of an analysis of aeromagnetic data in an area in northeastern Nevada, centred over the Carlin gold mine. The survey area, shown in Figure 1, covers about 120 square miles. Principal objective of this work is the mapping of geological structure at depth that may be favourable for gold mineralization.

### 1.2 The Aeromagnetic Data

Aeromagnetic data analyzed in this study were taken from a recent survey conducted by Terra Sense of Sunneyvale, California. Surveying basically consisted of 1/4 mile spaced traverses flown in a N-S direction with orthogonal tie lines at 3 mile spacing. All lines were flown at 400 foot altitude, above ground, using a Geometrics G813 magnetometer; +/- 0.2 gamma sensitivity. The digitally recorded data was reduced (removal of Geomagnetic Gradient and diurnal variation) and compiled in the form of a total intensity contour map at 1:48,000 scale and 5 gamma contour interval, a filtered and magnetic pole reduced magnetic intensity map plus a separate flight path recovery map. 535 line miles of aeromagnetic data were analyzed in this study.

### 1.3 Geological Setting

Principal reference to the geology of the area is the 1:250,000 scale Geological Map of Northcentral Nevada by J.H. Stewart & J.E. Carlson (1984); Map 50 of the Nevada Bureau of Mines & Geology, supplemented by 2 USGS 1:24000 scale geological maps compiled by J.G. Evans (1974); "Geological map of the Rodeo Ck. NE Quad." (Map GQ1116) and Geological map of the Helches Canyon Quad" (Map GQ1117) which cover about 75% of the project area.

### 1.5 Magnetic Profile Analysis

To ensure that the data was thoroughly assessed a study was done on the originally measured survey data - in profile form. Computer plotted magnetic intensity and radar altimeter profiles at 1:48000 scale (1"=10 gammas/133 feet vertical scales) were generated.

A basis for the profile analysis was provided by reference to model curves. Model curves in Figures 2a and 2b simulate anomalies due to prismatic bodies of various sizes, observed on E - W and N - S oriented lines. Along E - W lines, the anomalies appear almost symmetrical with regard to the position of the causative bodies. Along N-S lines, anomalies include a negative component north of the north contact of the causative rocks.

Horizontal dimensions 2A and 2B are given in units of depth of burial of the model  $H = 1$ . Depth extent of the prisms is large with respect to depth of burial.

Model curves provide a valuable insight as to where to locate magnetic contacts or faults from observed data.

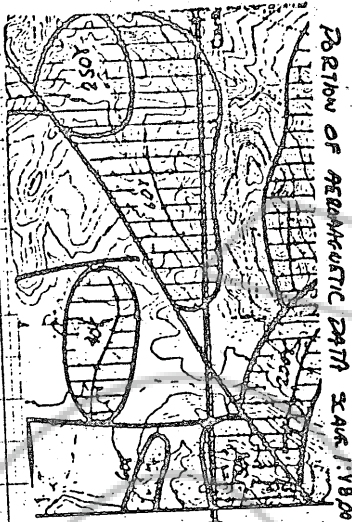
An empirical basis is also provided for determining depth to magnetic body. The horizontal width of the interval of maximum anomaly gradient on either the north, east, west and south side of the anomaly peak is about 55% of the depth below aircraft. It's about 45% in the case of very narrow units such as dykes.

The interpretation map which accompanies this report, shows determinations of depth to magnetic rocks in 100's of feet below ground. Individual depth determinations should be considered as being accurate to about +/- 20% because of the simplicity of the model used to establish the depth formula and because of insufficient data to define the magnetic anomaly adequately.

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5.3



SECTION OF AEROMAGNETIC DATA SCALE 1:18,000

Geophysical Data of



Carlin 2-10-72

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